

REMARKS

Claims 1-33 remain in the prosecution. Claims 1, 15, and 27 are currently amended.

Response to Arguments

The Examiner states that the Applicant's arguments filed 6/21/06 have been fully considered but they are not persuasive.

Rejections of the Claims under 35 U.S.C. §103(a)

In the Office Action, claims 1-33 were rejected under 35 U.S.C. §103(a) as being unpatentable over Poznanski (US 5,848,385 or "Poznanski") in view of Berger (US 6,304,841 or "Berger"), which purportedly properly incorporates Brown et al. (US 5,477,451 or "Brown"). See Office Action, paragraph 6. The Applicant respectfully traverses.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981 (CCPA 1974). Poznanski does not teach all the claim elements either singularly or in combination with Berger. For example, the Examiner asserts that Poznanski teaches the claim element, "determining whether one or more of the modified target language translations represents an improved translation in comparison with the initial current target language translation" of claim 1. Poznanski, however, teaches "Each transformation **should** have the effect of improving the structure so that the structure converges on a correct language translation." Col. 4, lines 13-15 (emphasis added). Poznanski, therefore, merely **assumes** that the successive transformation results in a better translation. Because assuming that a transformation should have the effect of improving the structure is not equivalent to "determining whether one or more of the

modified target language translations represents an improved translation in comparison with the initial current target language translation” as recited in claim 1, Poznanski (in combination with Berger) can not teach or suggest all the claim limitations, as asserted by the Examiner. For at least this reason, Poznanski does not teach all the claim elements either singularly or in combination with Berger.

Nothing in Poznanski, Berger, nor Brown et al. teaches or suggests current independent claims 1, 15, and 27. The Examiner, however, asserts that “at the time of the invention, it would have been obvious to one ordinarily skilled in the art to modify Poznanski’s alignment with Berger’s alignment.” Page 6. The Examiner also asserts that “[t]he motivation for doing so [combining the alignment of Poznanski with the alignment of Berger] would have been to determine the most probable alignment.” Page 6.

“To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.” *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

Poznanski teaches “apply[ing] rules of the source language grammar to the morphemes [of the text in the source language] so as to define the grammatical relationships between the morphemes.” Col. 3, lines 41-43. Poznanski applies “bilingual equivalence rules which cause each source language sign to be replaced by an equivalent target language sign such that each source language morpheme is transformed to its equivalent target language morpheme and the grammatical data of

each source language sign is transformed into corresponding grammatical data for the target language.” Col. 3, lines 50-56. After generating the grammatical structures, Poznanski teaches “evaluat[ing] the validity of the first attempt at the target language text by applying a set of target language grammar rules to the signs [morphemes and their associated data].” Col. 4, lines 3-5. Poznanski further states, “[i]f the evaluation is not successful, then the structure is transformed . . . so as effectively to alter the parsing tree without destroying any part of the structure which has been evaluated as being correct.” Col.4, lines 9-12. The evaluation includes evaluating “whether the structure in the target language is correct. In order to do this, the evaluator applies a set of English grammar rules.” Col. 6, lines 22-24. Thus, once a portion of the substructure described in Poznanski is deemed correct, no further adjustments are made to that portion. Therefore, Poznanski merely teaches a binary grammatical “correct/not correct” decision-making process as to the accuracy of a translation.

Berger, in contrast to Poznanski, analyzes potential translations of a source word into more than one alternate target words or phases. “Suppose we wish to model an expert translator’s decisions on the proper French rendering of an English word.” Berger, Col. 15, lines 7-9. The observation relied upon by Berger is that “the expert translator always chooses among . . . five French phrases.” Col. 15, lines 20-21. Berger thus relies on the probabilities generated from training data to determine which of the five phrases is most likely to be an accurate translation in any given instance. To model which of the five phrases is most likely to be accurate, Berger discloses considering context. See, e.g., Col. 17, lines 20-57. The context described in Berger, unlike the morphemes and structure described in Poznanski, does not rely on a set of grammar rules but rather is based on neighboring words. See, e.g., Col. 7, line 44-Col. 8, line 49. At least because the probabilities described in Berger are not based on grammatical rules, it is not apparent to one of ordinary skill in the art that the probabilities described in Berger can be applied to the alignments taught by Poznanski.

Further, per MPEP §2143.01, "...it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). The Examiner's statement that the motivation to combine Poznanski with Berger is to determine the most probable alignment is not proper motivation. Page 6.

Poznanski, rather than providing a motivation, teaches away from incorporating additional alignment considerations to evaluate correctness of a translation. Poznanski states, [b]y preserving the grammatical relationships during the transformation ... and by not disturbing correctly evaluated structure ... an **efficient and elegant** technique is provided for translating quickly and accurately from the source language to the target language." Col. 9, lines 22-27. Because the context of described in Berger is based on a neighboring word rather than surrounding grammatical structures as described in Pozananski, changing a single word in the system described in Berger is likely to cause changes to other probabilities within the translated text. See, e.g., Col. 31, line35-Col. 33, line 52.

The Examiner takes Official Notice regarding claims 11, 12-14, and 29-32, or regarding portions thereof. Applicants disagree that repeating translations until a proper translation is found and/or until the occurrence of a termination condition is well known. Applicant, thus, formally requests a specific showing of the subject matter in ALL of the claims in any future action. Note excerpt from MPEP:

"If the applicant traverses such an [Official Notice] assertion the examiner should cite a reference in support of his or her position." See MPEP 2144.03.

Neither Poznanski, Berger, nor Brown et al., either singularly or in combination, teach the subject matter set forth in amended claims 1, 15, and 27. Applicant therefore

respectfully requests that the Examiner withdraw the rejection of claims 1-33 under 35 U.S.C. §103(a).

Amendments to the Claims

For at least the reasons discussed herein, the Applicant disagrees with the rejections of claims 1-33. However, in an effort to expedite the present application to allowance, the Applicant has amended the independent claims 1, 15, and 27.

The Applicant notes that the amendment of the claims in this fashion should not be read as concurrence with the Examiner's rejection but, instead, an effort to bring this application to allowance as quickly as possible. In that regard, the Applicant expressly reserves the right to pursue the previously presented claims and/or new claims directed to previously unclaimed subject matter in a continuation application prior to issuance of the present application.

Specifically, claim 1 has been amended to set forth, in part, "estimating a probability of correctness of the initial translation, the probability based on alignment links between words and phrases in the source language and words and phrases in the target language" and "estimating a probability of correctness of the one or more modified target language translations, the probability based on alignment links between words and phrases in the source language and words and phrases in the target language" (underlining included to show amendments). These amendments are not taught or suggested by Poznanski, Berger, or by the combination thereof. Further, no new matter is added by the amendment. See, *e.g.*, FIGs. 3 and 4 of the application as filed. Claims 15 and 27 have been amended in a similar fashion.

CONCLUSION

Based on the foregoing remarks, Applicant believes the application is in condition for allowance. If the Examiner has any questions regarding the case, the Examiner is invited to contact Applicant's undersigned representative.

Respectfully submitted,

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